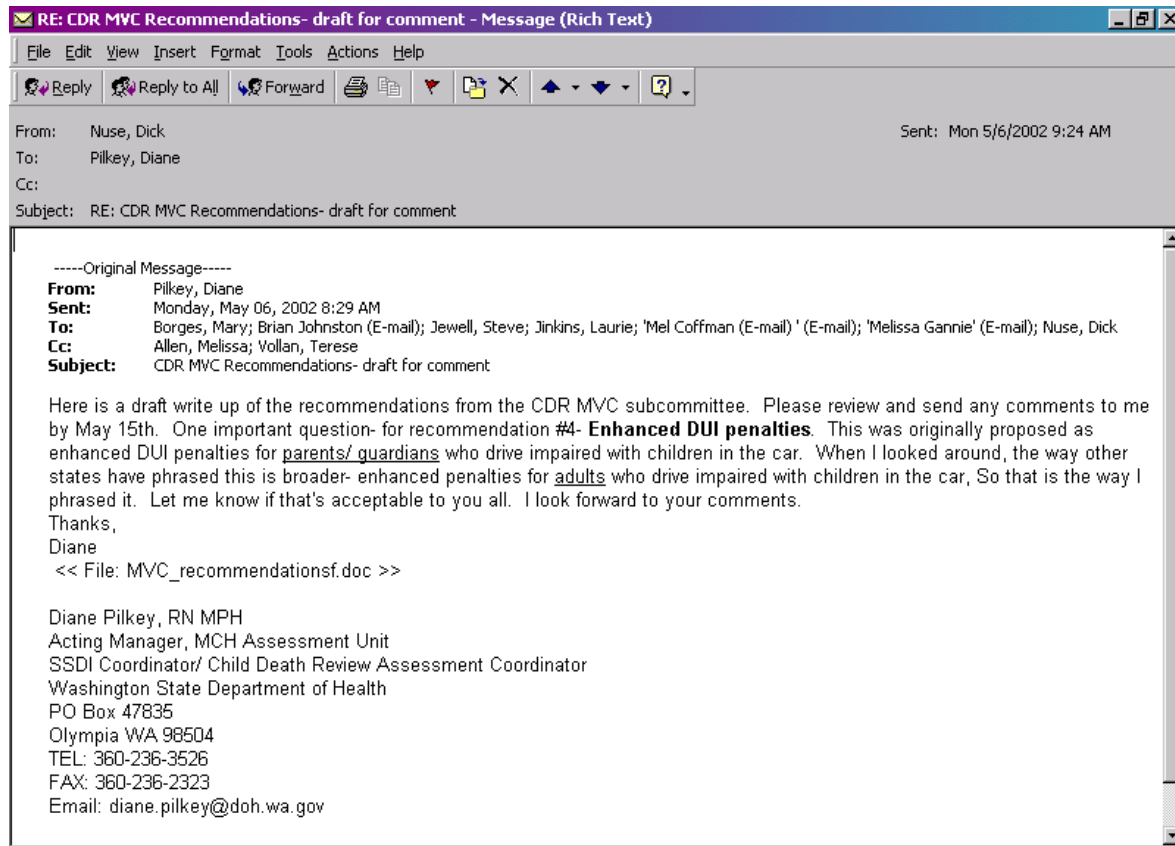


CDR Motor Vehicle Crash Recommendations Email:



CDR MVC Recommendations Attachment:

Recommendations to Reduce Motor Vehicle Crash (MVC) Deaths and Injuries From the Child Death Review (CDR) State Committee May 2002

Background:

Nationally, in 1998, motor vehicle crashes (MVC) caused over 43,000 deaths and 4.2 million emergency department visits and are the leading cause of death for persons ages 1-34. For all ages, MVC are the leading cause of deaths due to unintentional injuries and the leading cause of years of potential life lost (YPLL).¹ MVC related injuries and deaths cost the United States approximately \$150 billion annually, including property damage, lost productivity, medical expenses.²

¹ Source: CDC State Injury Indicators Report, December 2001.

² MMWR May 18, 2001/ 50(RR07); 1-13.

Washington State Data:

MVC leading cause of injury deaths to children in Washington state, accounting for an average of 90 deaths for ages 0-17 annually. In 2000, the death rate due to motor vehicle crashes was 6.1 per 100,000 population 0-17, representing 92 deaths. For all ages, MVC accounted for 690 deaths to Washington residents in 2000. In 1999, there were 691 hospitalizations due to motor vehicle crashes for Washington state children ages 0-17.³

Child Death Review (CDR) Data Key Findings:

- **Deaths Reviewed:** In 1999 and 2000, there were 175 motor vehicle crash deaths in Washington children ages 0-17. Local CDR teams reviewed 75% (n=132) of the MVC deaths to children in 1999 and 2000.
- **Location of Injury:** 29 % of the crashes occurred on a rural road, 27% on a highway, and 17% on city streets.
- **Contributing factors include:** The most common contributing factors were driver error (52%), excess speed (39%), and alcohol/drugs (20%).
- **Age of Driver:** Where age of driver was known, 59% of the drivers of the car the child who died was riding in were teens (30% of the deaths occurred to the operator, and 66% occurred to the passenger). For those MVC deaths where the child was a passenger in a car, van, truck or SUV, an adult was driving in 62% of the MVC.
- **Impaired Driving:** Impairment due to drugs or alcohol was involved in 28% of the MVC deaths where the child was in a car, van, truck or SUV. Impairment was cited as a factor in 43% of the deaths where the teens was the driver of the car the child died in and 27% of the MVC where the driver was an adult. Where an adult was driving and impairment was a factor, the impaired person was the adult supervising the child in half of the deaths.⁴
- **Seatbelt Use:**
 - ◆ For children ages 10-17, seatbelts were in use only 27% of the time.
 - ◆ 80% of 10-14 year olds and 65% of 15-17 year olds were not wearing a seatbelt at the time of the MVC.
 - ◆ 78% of males and 53% of females ages 10-17 were not wearing their SB.

³ Source: VistaPHw 2.3.2, Calculator Version 2.3.2

⁴ Children were passengers in a car, van SUV, or truck. Caution should be used interpreting these due to small numbers- data here are from 1999-2001 reviews.

Interventions to Decrease Injury and Death to MVC Occupants

“Among front seat occupants, safety belt usage reduces the risk for fatal injury by an estimated 45% and the risk for moderate to critical injury by 45% to 50%. Use of child safety seats reduces the likelihood of fatal injury by an estimated 69% for infants and 47% for toddlers.”⁵

Recommendations from the Community Guide to Preventive Services

Recommendations from the independent, nonfederal Task Force developed by the US Department of Health and Human Services (DHHS) and public and private partners. These recommendations are based on systematic reviews of research. The Community Guide evaluated twelve recommendations to reduce Motor vehicular occupant injury and recommended or strongly recommended eleven of these (summarized below).

Intervention	Recommendation
Interventions to Increase the Use of Child Safety Seats	
<u>Child safety seat use laws</u>	Strongly Recommended
<u>Community-wide information + enhanced enforcement campaigns</u>	Recommended
<u>Distribution + education programs</u>	Strongly Recommended
<u>Incentive + education programs</u>	Recommended
Education-only programs	Insufficient Evidence
Interventions to Increase the Use of Safety Belts	
<u>Safety belt use laws</u>	Strongly Recommended
<u>Primary enforcement laws (versus secondary enforcement laws)</u>	Strongly Recommended
<u>Enhanced enforcement programs</u>	Strongly Recommended
Interventions to Reduce Alcohol-Impaired Driving	
<u>0.08% blood alcohol concentration (BAC) laws</u>	Strongly Recommended
<u>Lower BAC laws for young or inexperienced drivers</u>	Recommended
<u>Minimum legal drinking age laws</u>	Strongly Recommended
<u>Sobriety checkpoints</u>	Strongly Recommended
<u>Server intervention programs (face-to-face instruction with management support)</u>	Recommended

Of the interventions recommended by the Community Guide, Washington State currently has all except one in place, with the exception being sobriety checkpoints, which are not constitutional in the state. A primary seatbelt law was passed by the legislature in 2002.

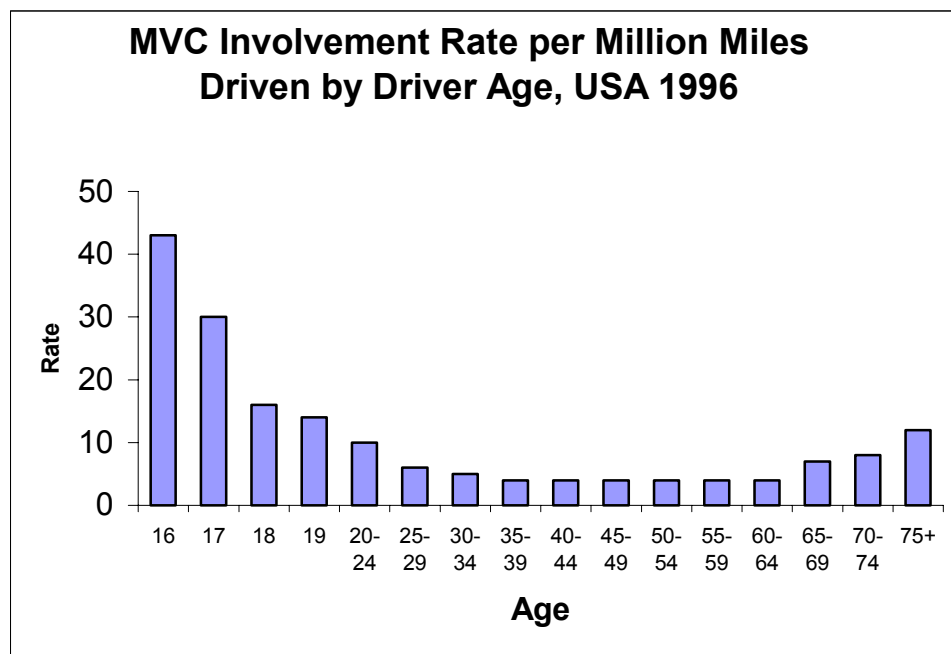
⁵ Source: State Injury Indicators Report, Centers for Disease Control and Prevention, December 2001.

CDR State Committee Motor Vehicle Subcommittee Recommendations:

The CDR State Committee Motor Vehicle Subcommittee decided to focus primarily on developing recommendations to address MVC fatalities and injuries to teens. The rationale for this was that Washington already has many programs addressing child safety issues and that MVC fatality and injury rates are highest in teens. According to NHTSA (the National Highway Traffic Safety Administration):

*“Sixteen-year-old drivers have higher crash rates than drivers of any age, including older teenagers. The very youngest drivers are most likely to engage in risky behaviors such as speeding and tailgating. Because of their inexperience, beginners are least able to cope with hazardous situations. When this is combined with their aggressive driving style, a high crash rate results.”*⁶

Based on miles driven, the highest MVC involvement and driver fatality rates are found among the youngest and oldest drivers. Compared with the fatality rate for drivers ages 25–69, the rate for 16- to 19-year-old drivers is about four times as high, and the rate for drivers age 85 and older is nine times as high. “The problem is worst among 16 year-olds, who have the most limited driving experience and an immaturity that often results in risk-taking behind the wheel.”⁷ The presence of other teenagers in the car may encourage risky driving and is associated with increased fatal crash risk among young drivers.⁷



Source: <http://www.nhtsa.dot.gov/people/injury/newdriver/SaveTeens/sect1.html>

⁶ National Highway Traffic Safety Administration (NHTSA), Graduated Driver Licensing Questions and Answers. <http://www.highwaysafety.org>

⁷ http://www.highwaysafety.org/safety_facts/teens/beginning_drivers.htm

The following recommendations from the State CDR Committee MVC Subcommittee are based on a review of data from the CDR database and other data sources, including data from the Fatal Accident Reporting System (FARS).

1. **Graduated Drivers Licensing (GDL) Education:** Early evaluations have shown the effectiveness of GDL in reducing MVC in teens. Since instituting GDL, California has seen a 5 % reduction in teen crashes and Oregon has seen a 16 % reduction in crashes for male drivers.⁸ Because Washington has just instituted the graduated licensing system, there is still confusion and misinformation out there about the rules for graduated licensing. There have already been articles in Washington papers citing the lack of knowledge of teens, parents, and some law enforcement personnel and the perceived lack of enforcement of the GDL law.⁹ It is vital to disseminate clear and accurate information about both the rules of the GDL system and the effectiveness of the system in reducing deaths and injuries due to MVC.

Recommendation: Educate parents, children, and the broad law enforcement community about components and importance of the graduated licensing law.

2. **Enforcement of Graduated Licensing and Primary Seatbelt Laws:** Primary seatbelt laws and graduated driving licensing requirements have been proven effective in reducing MVC fatalities. In the studies reviewed by the CDC's Community Guide Task Force, the median decrease in fatalities was 8% greater in primary law states than in secondary law states while the median increase in safety belt use in primary law states relative to secondary law states was 14% for observed use.¹⁰ Early results from states with GDL laws indicate a decrease in MVC among teens. The effectiveness of these laws in reducing deaths and injuries is related to whether the laws are routinely and consistently enforced.¹¹

Recommendation: Encourage strict enforcement of the graduated licensing and primary seatbelt laws.

3. **Enhanced DUI penalties:** A study by University of Michigan Transportation Research Institute found that more than half of elementary school-aged children killed in alcohol-related crashes were not with a drunken teenager, but were riding in a vehicle with someone of parent age who was intoxicated.¹² This is consistent with data from the CDR database. Some states have passed laws enhancing DUI penalties for adults who drive impaired.

⁸ NHTSA website: <http://www.nhtsa.dot.gov/people/outreach/stateleg/gradhoweffective.html>

⁹ "New teen-driving law rarely enforced" (Associated Press, The Olympian February 25, 2002)

¹⁰ Dinh-Zarr TB, Sleet DA, Shults RA, Zaza S, Elder RW, Nichols JL, Thompson RS, Sosin DM, Task Force on Community Preventive Services. Reviews of evidence regarding interventions to increase use of safety belts. Am J Prev Med. 2001; 21 (4S): 48-65

¹¹ <http://www.nhtsa.dot.gov/people/outreach/stateleg/seatemphasize.html>

¹² University of Michigan Transportation Research Institute presented at the annual Society of Automotive Engineers meeting in Washington

Recommendation: Explore enhanced DUI penalties for adults who drive impaired while children are in the car.

4. **CDR Program Recommendations:** These recommendations focus on activities the DOH CDR program can institute to improve the quality of the data local CDR teams collect. Local CDR teams continue to ask for technical assistance in defining data variables in the CDR database and in designing and evaluating interventions to reduce MVC deaths. Data linkages can improve the quality and completeness of the data.

Recommendations:

- ❑ Encourage CDR program to provide technical assistance to local teams on understanding and using MVC data to design, implement, and evaluate interventions at the community level.
- ❑ Encourage CDR to continue data linkages with existing data sources to enhance the information in the state database.